

FIG. 1 (PRIOR ART)

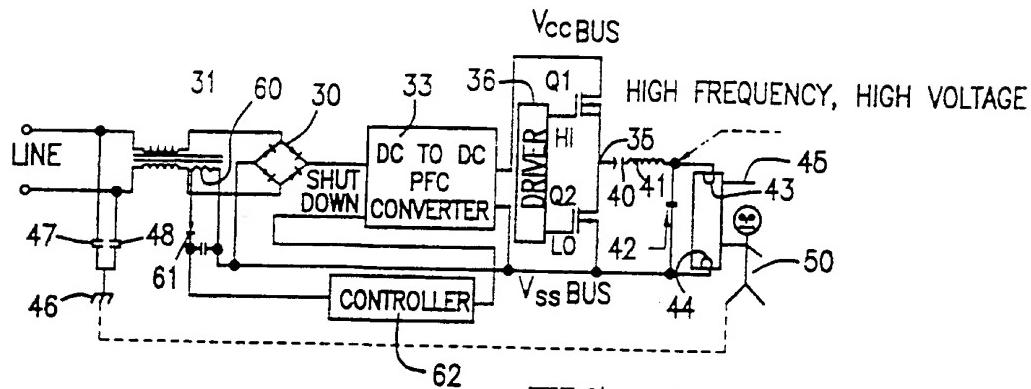


FIG. 2

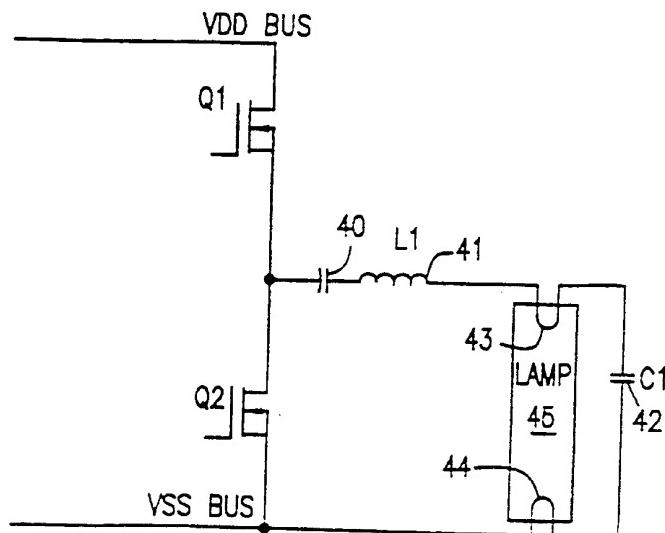


FIG. 3 (PRIOR ART)

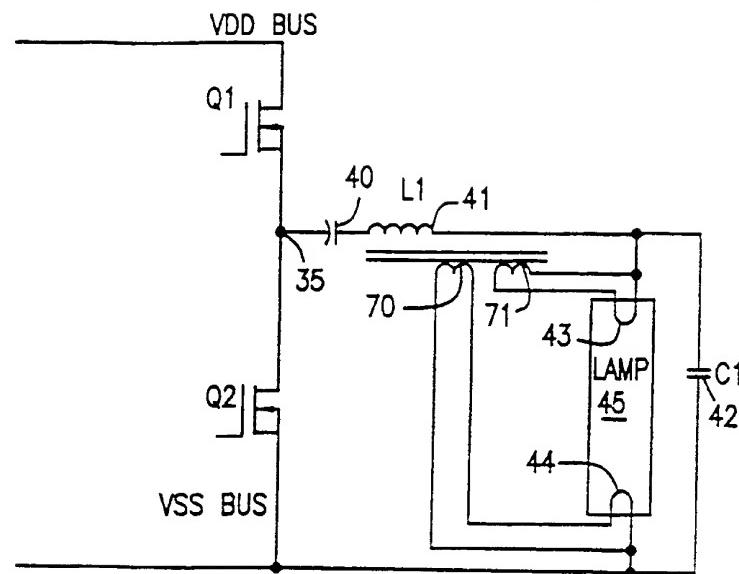


FIG. 4 (PRIOR ART)

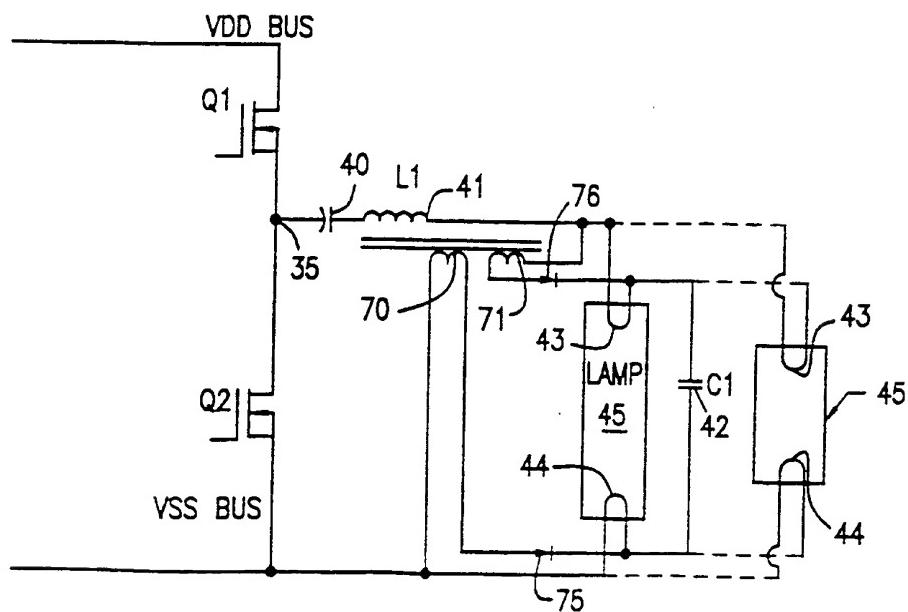


FIG. 5

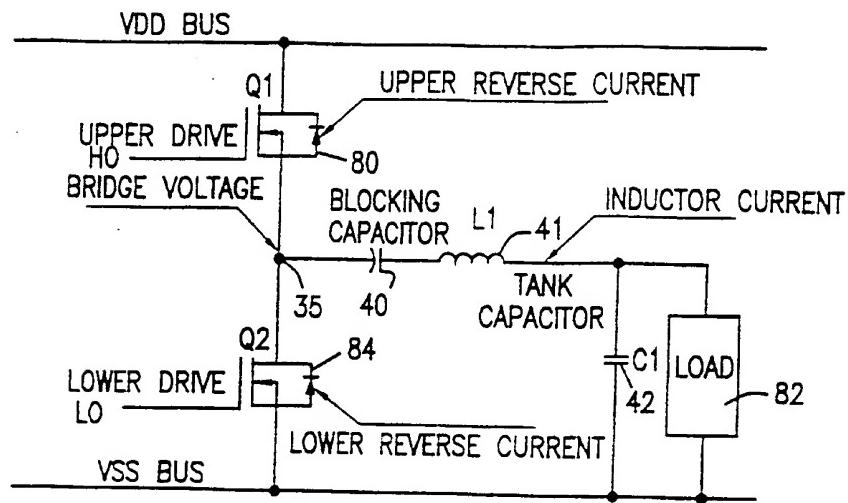


FIG. 6 (PRIOR ART)

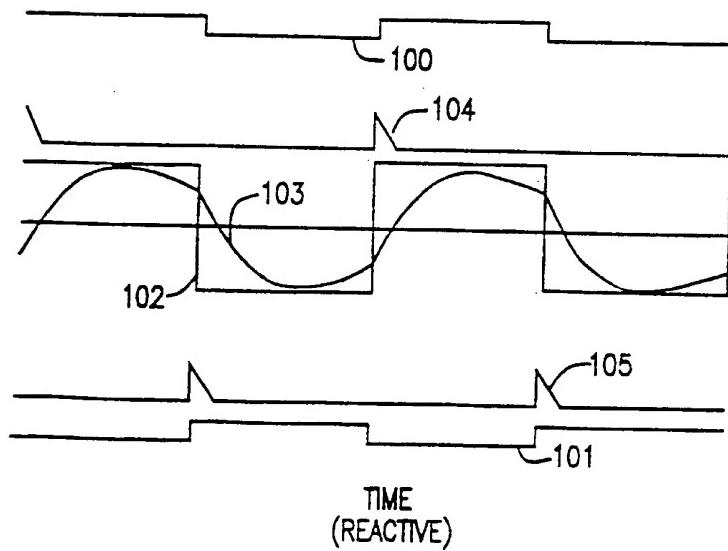
RECORDED BY OPTICAL SCANNER  
BY AUTOMATIC DOCUMENT PROCESSING SYSTEM

FIG. 7

09/857616

WO 00/35252

PCT/IB99/02087

4/17

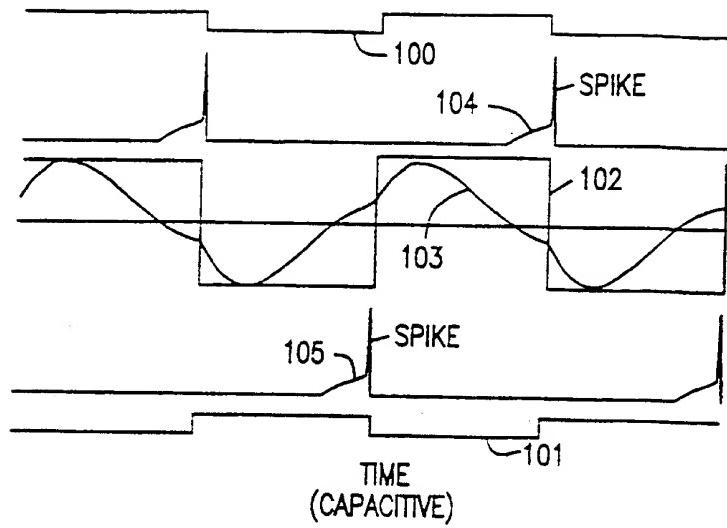
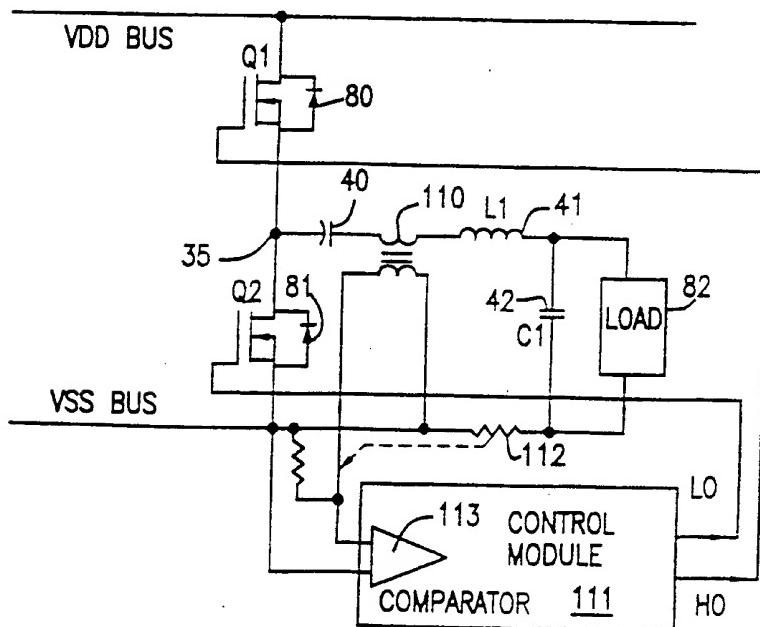
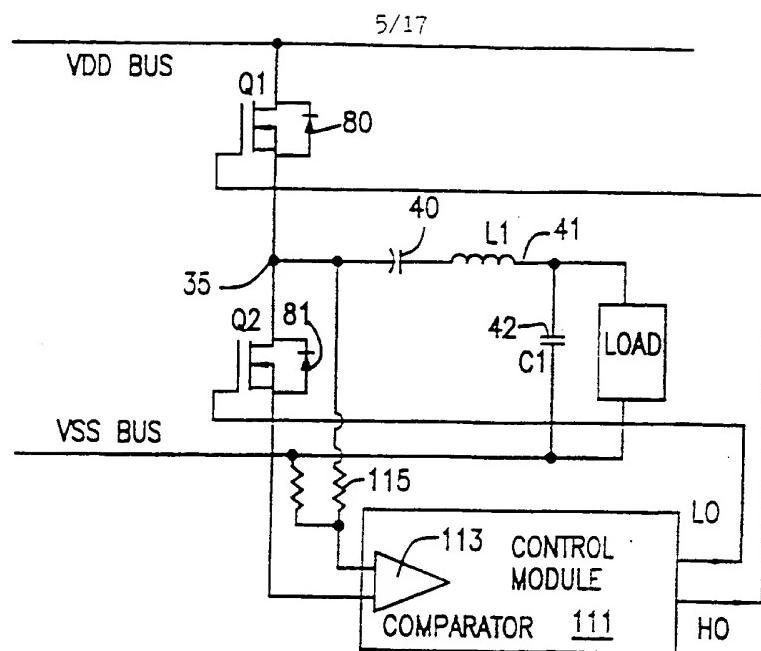


FIG. 8



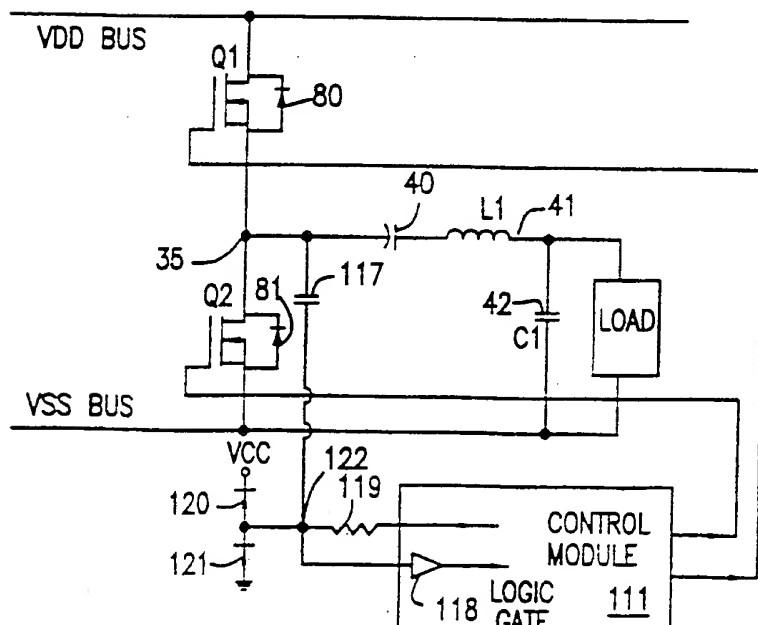
(CURRENT SENSE PROTECTION)

FIG. 9



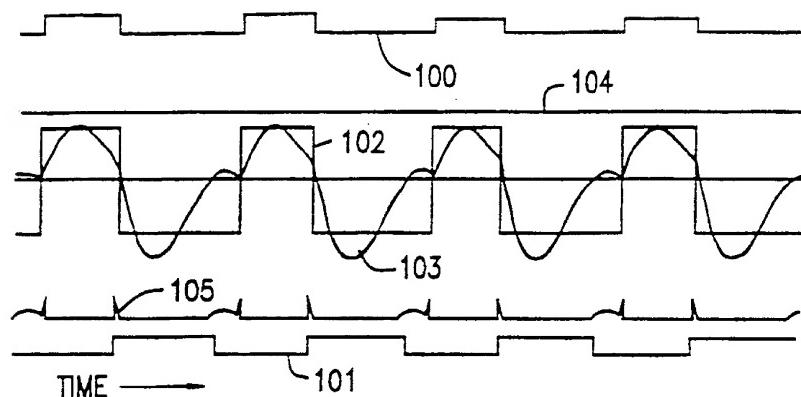
(VOLTAGE SENSE PROTECTION)

FIG. 10



(DV/DT SENSE PROTECTION)

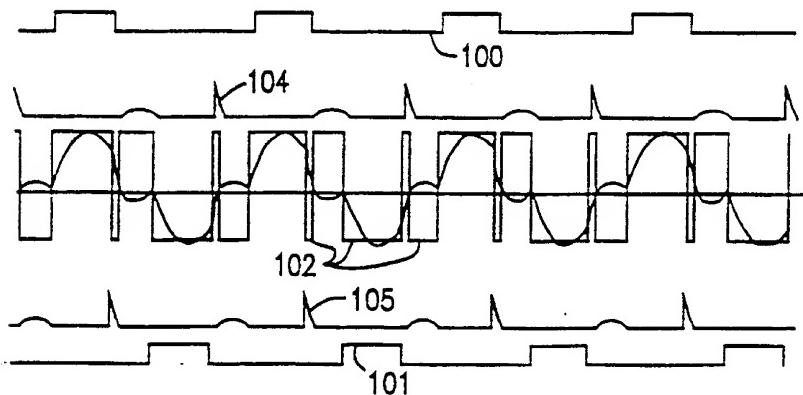
FIG. 11



(CONTINUOUS REACTIVE LOAD)

FIG. 12

RECORDED BY FAX 3500-3500-3500



(PREDICTED MINIMUM DEAD TIME)

FIG. 13

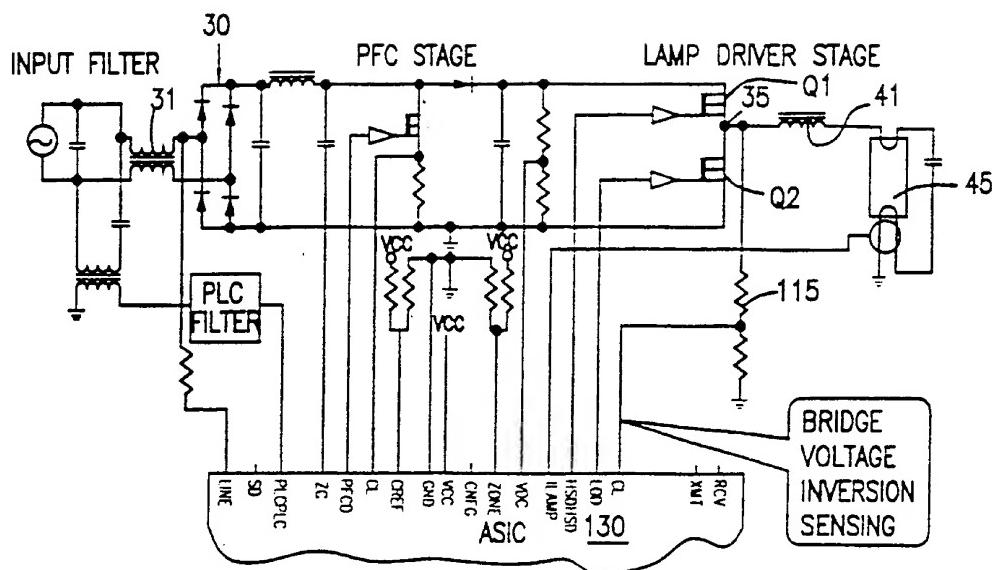


FIG. 14

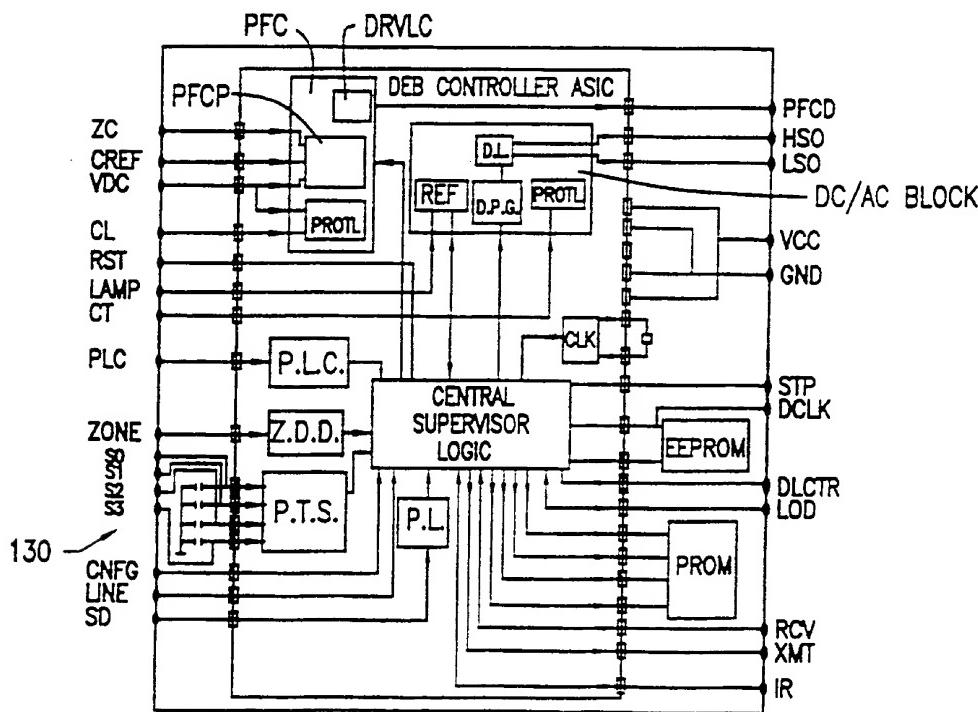
(INTERCONNECTION DIAGRAM FOR  
PLC CONTROL APPLICATION)

FIG. 15

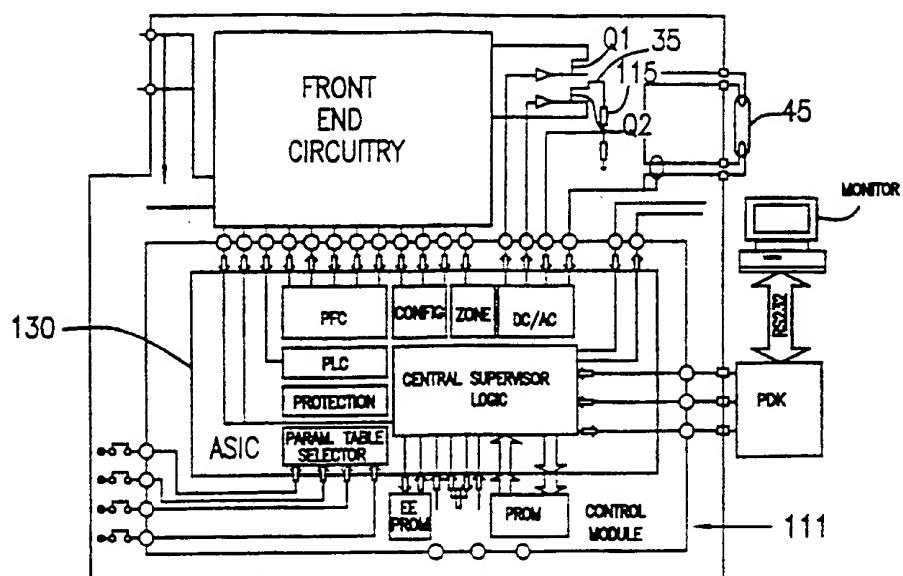
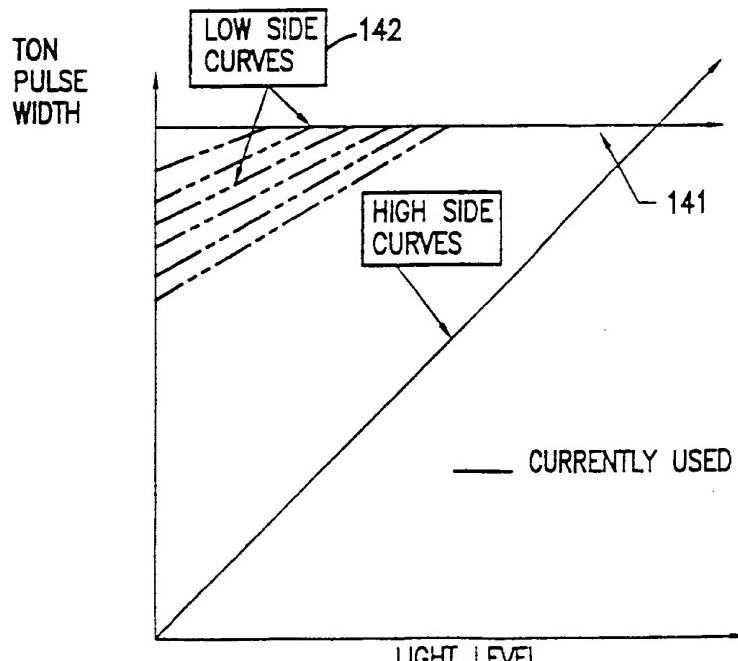


FIG. 16



(BRIDGE CONTROL GRAPHICAL DESCRIPTION OF RANGE  
OF THE PULSE WIDTH FOR THE BRIDGE SWITCHES)

FIG. 17

PROGRESSIVE IMAGE SCANNING

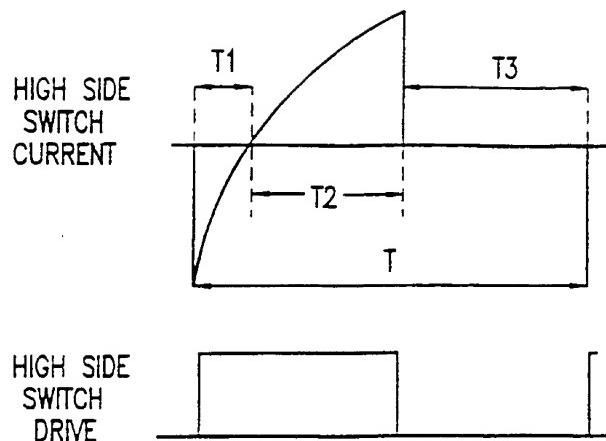


FIG. 17A

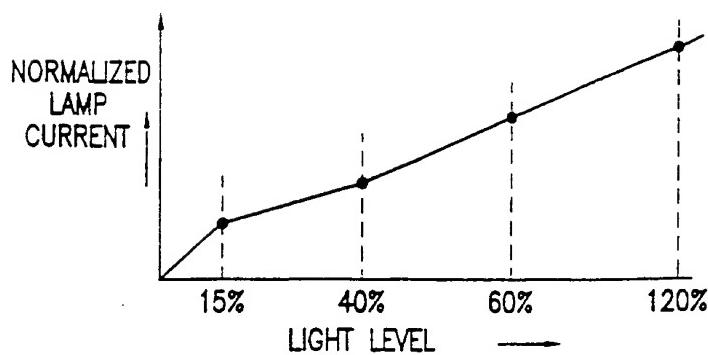


FIG. 20

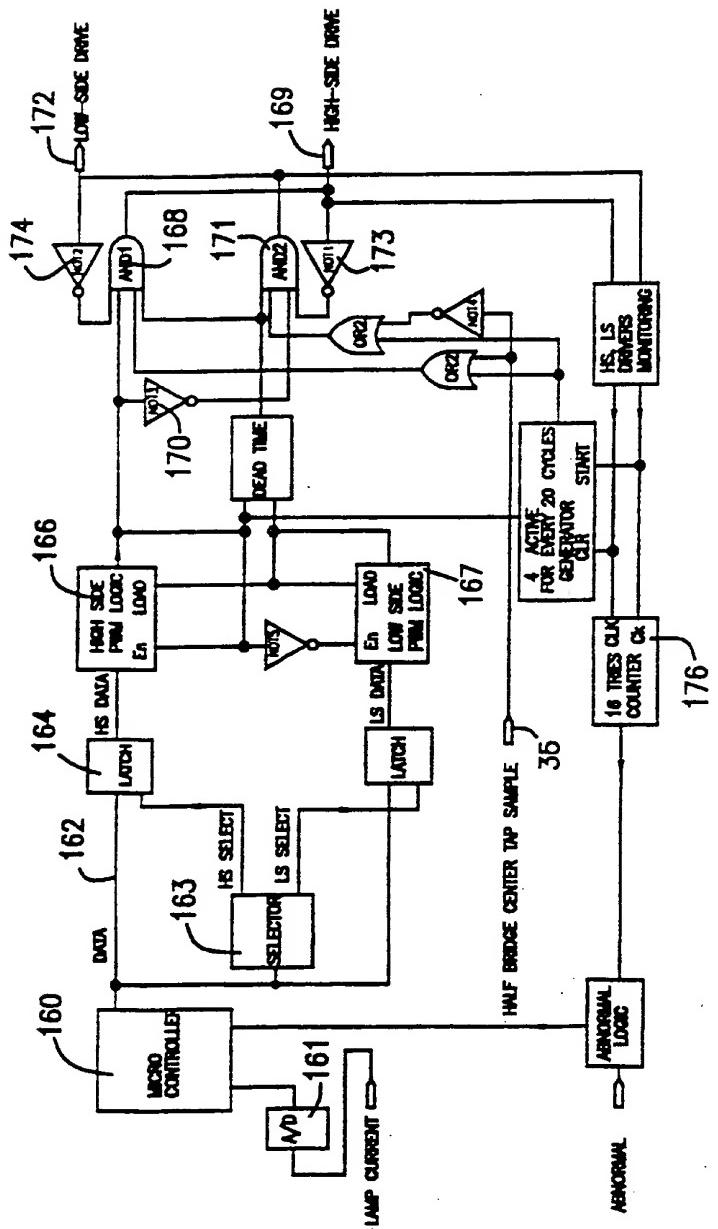


FIG. 18

(ASIC DC/AC BLOCK DIAGRAM)

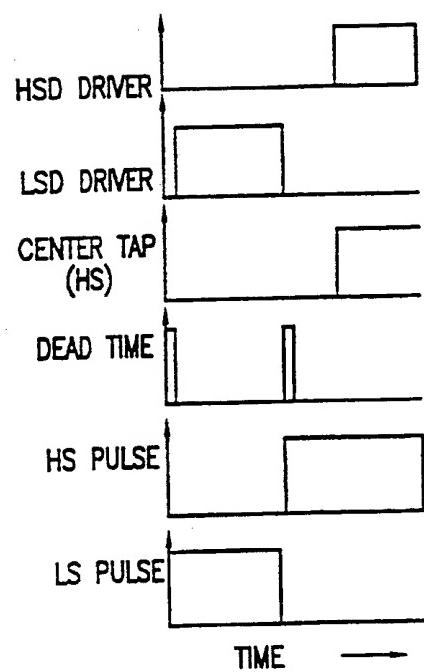


FIG. 19

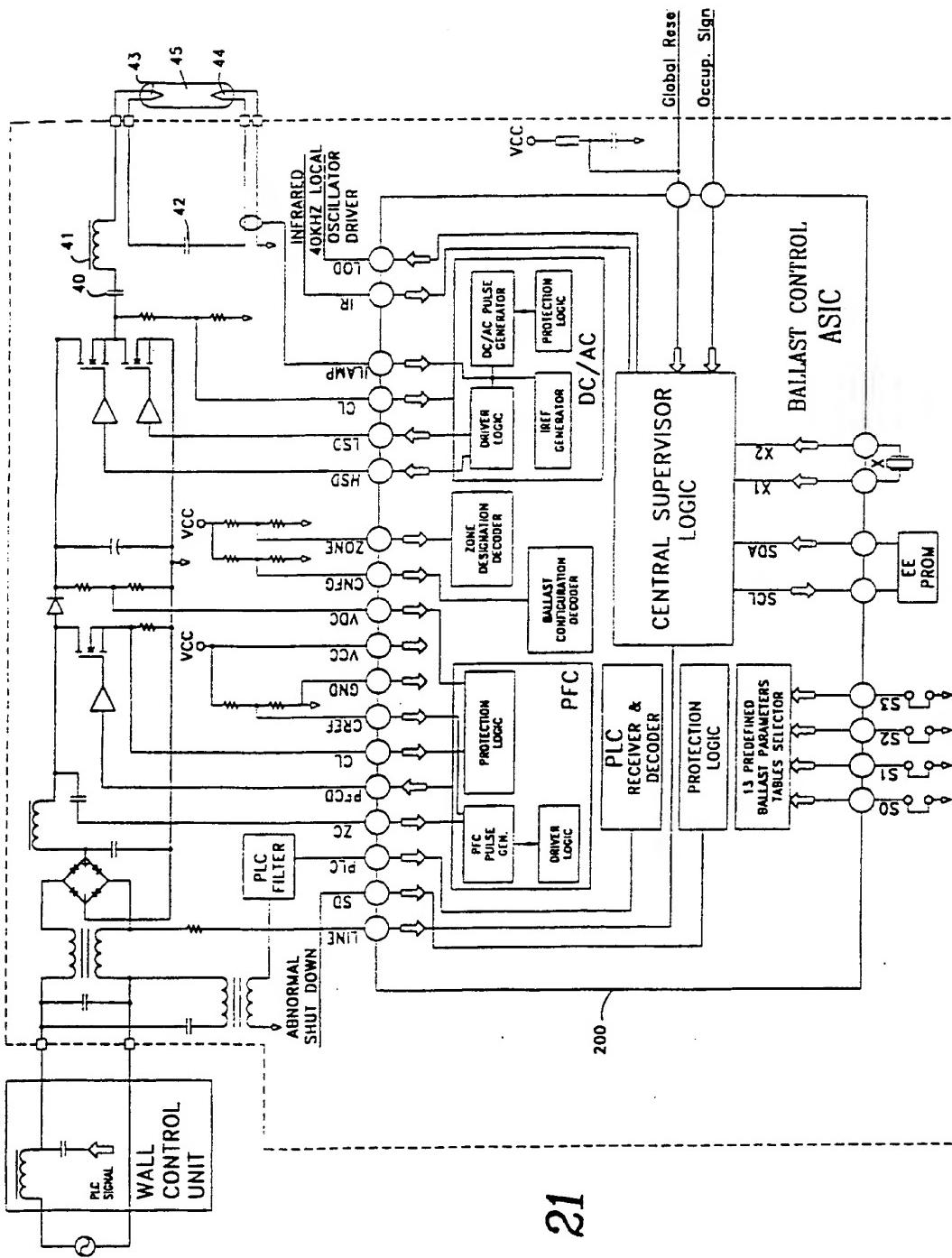


FIG. 21

09/857616

WO 00/35252

PCT/IB99/02087

13/17

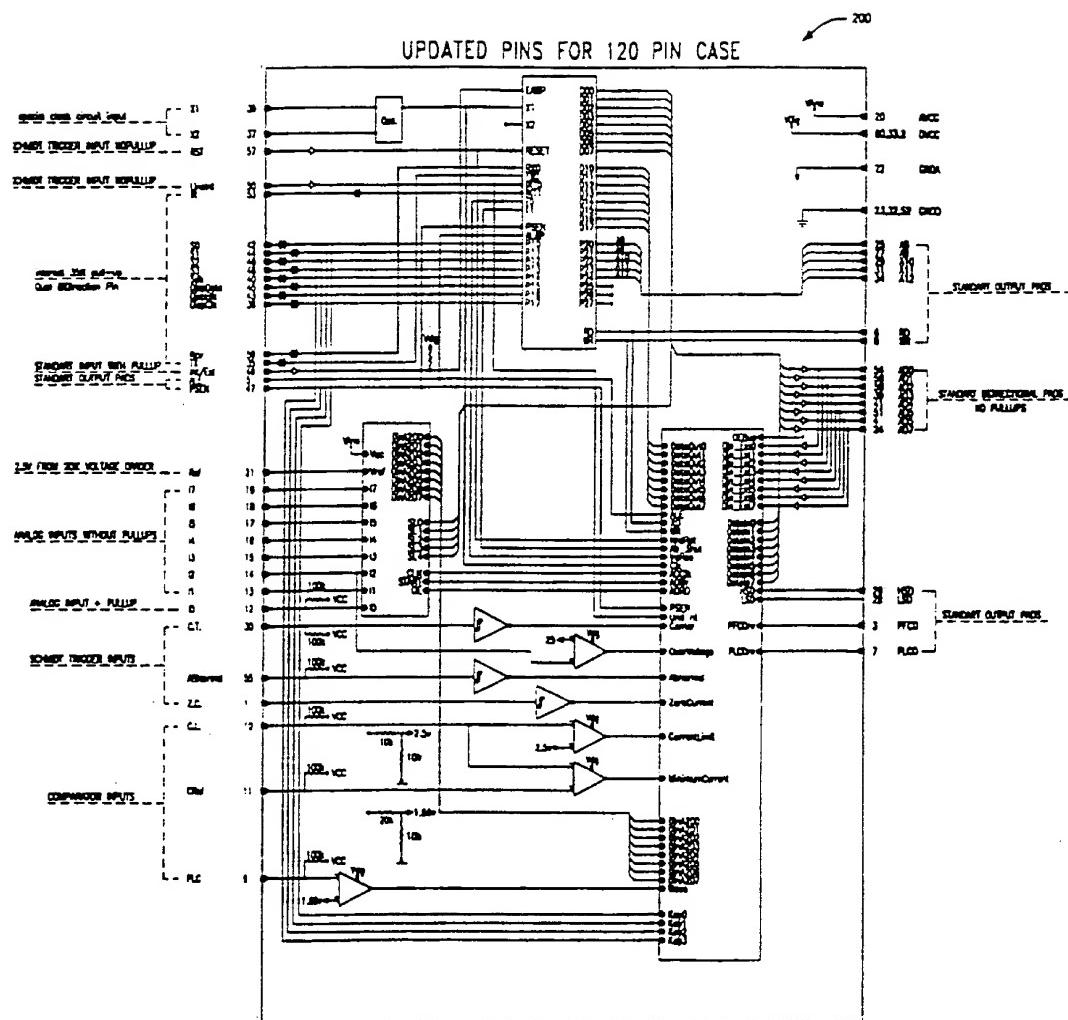


FIG. 21A

09/857616

WO 00/35252

PCT/IB99/02087

14/17

## ASIC PIN ASSIGNMENT

Die Pin Name	PLC D.E.B.	DC D.E.B.	LOCAL D.E.B.	OCC D.E.B.	E.B.	W.C.U.	Notes
Vcc Digital	+	+	+	+	+	+	
Gnd Digital	+	+	+	+	+	+	
X1-Crystal	+	+	+	+	+	+	
X2-Crystal	+	+	+	+	+	+	
Reset	+	+	+	+	+	+	
Vcc Analog	+	+	+	+	+	+	
Gnd Analog	+	+	+	+	+	+	
V Ref.	+	+	+	+	+	+	
10	30Kohm	0ohm	51Kohm	13Kohm	130Kohm	x	Analog
11	Zone	DC control	Sensor,Occ	Occ. Dimmed level	x	Sensor,Occ	Analog
12	VDC (dc bus)	VDC (dc bus)	VDC (dc bus)	VDC (dc bus)	VDC (dc bus)	x	Analog
13	ILamp	ILamp	ILamp	ILamp	ILamp	x	Analog
14,15,16,17	x	x	x	x	x	x	not used
Line Int.	+	+	+	+	+	+	
IR	x	x	+	x	x	+	
S0-S3	+	+	+	+	+	Key0-Key3	table
Sclk	Sclk	Sclk	Sclk	Sclk	Sclk	Sclk	table
Tx	Sda	Sda	Sda	Sda	Sda	Sda	table
Recv	x	x	Occ. OFF	Occ.	x	com. revr	
Disp. Blank	x	x	x	x	x	+	
Disp. Data	x	x	x	x	x	+	
Disp. Clk	x	x	x	x	x	+	
Abnormal	+	+	+	+	+	x	
Zero Curr.	+	+	+	+	+	+	
Curr. Ref.	+	+	+	+	+	x	
Curr. Limit	+	+	+	+	+	x	
Center tap	+	+	+	+	+	x	
PLC Drv	x	x	x	x	x	+	
H.S.D.	+	+	+	+	+	x	
L.S.D.	+	+	+	+	+	x	
PLC Data	+	x	x	x	x	x	
PFC Drv	+	+	+	+	+	x	
AD0-AD7	x	x	x	x	x	+	Ext ROM use
A8-A12	x	x	x	x	x	+	Ext ROM use
ALE	x	x	x	x	x	+	Ext ROM use
WR	x	x	x	x	x	+	Ext ROM use
RD	x	x	x	x	x	+	Ext ROM use
Int/ExtROM	x	x	x	x	x	+	Ext ROM use
Psen	x	x	x	x	x	+	Ext ROM use

FIG. 22

09/857616

WO 00/35252

PCT/IB99/02087

15/17

PRINTED IN U.S.A. BY RICOH CO., LTD.

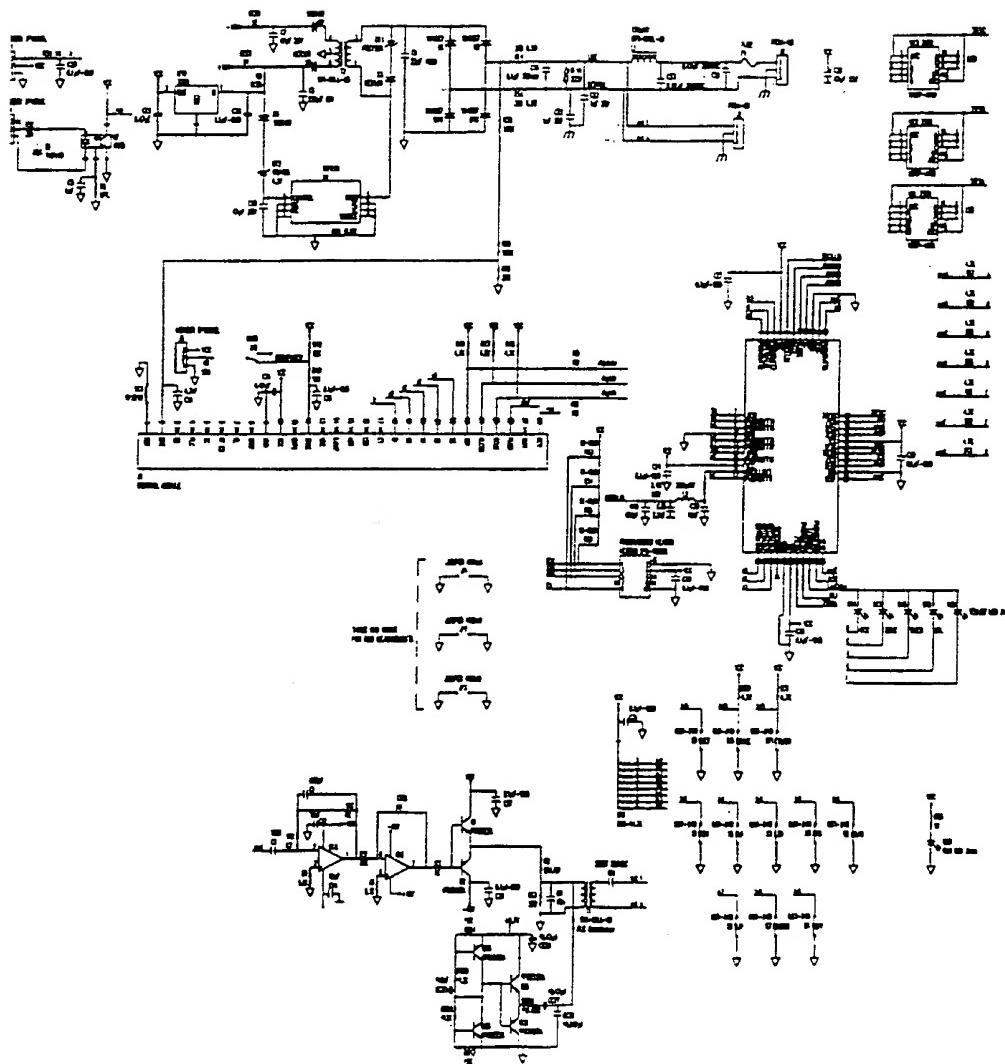


FIG. 23

09/857616

WO 00/35252

PCT/IB99/02087

16/17

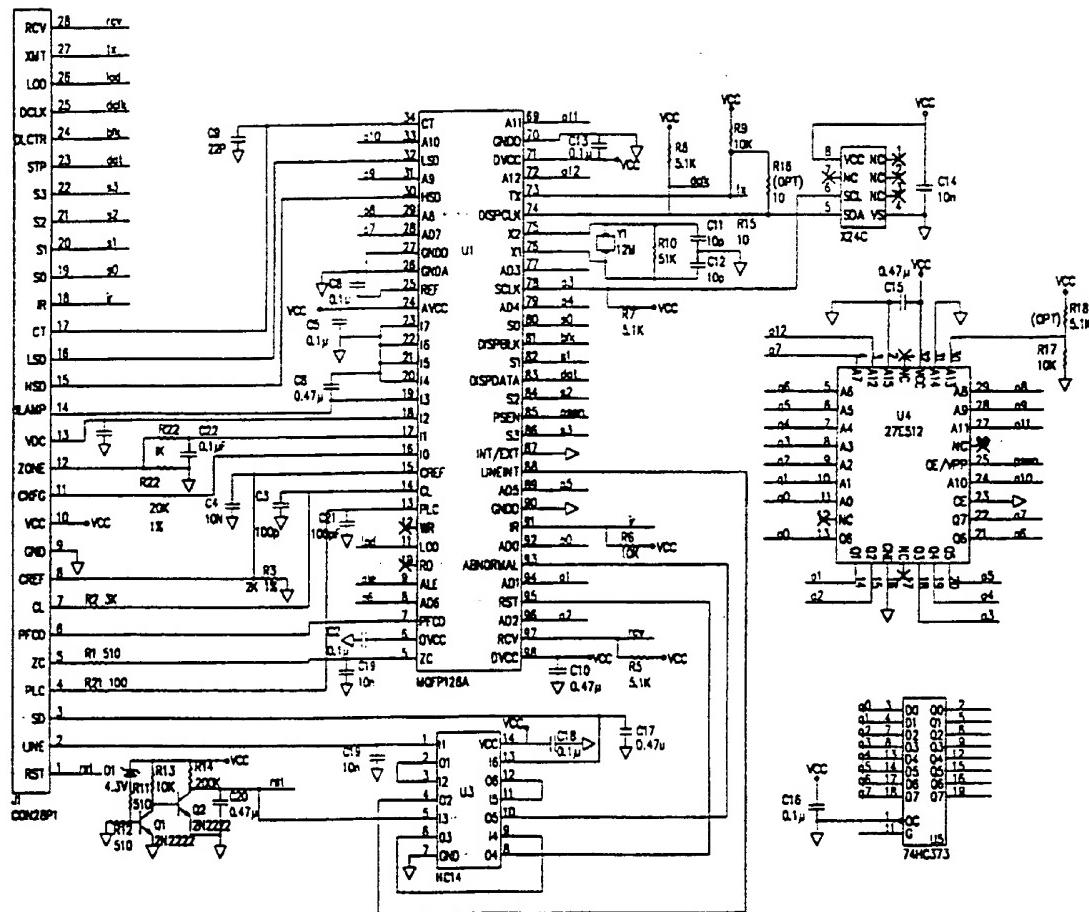


FIG. 25

